R at (25℃)= 10KΩ±1%

B25/50= 3950K±1%

T(°C)	Rmin(KΩ)	Rmax(KΩ)	Rnom(KΩ)	Tol.	T(°C)	Rmin(KΩ)	Rmax(KΩ)	Rnom(KΩ)	Tol.
-50	459.022	506.035	482.529	4.87%	126	0.313	0.342	0.328	4.42%
-49	442.614	487.587	465.101	4.83%	127	0.305	0.333	0.319	4.44%
-48	422.784	465.311	444.047	4.79%	128	0.297	0.324	0.311	4.47%
-47	403.055	443.170	423.113	4.74%	129	0.289	0.316	0.302	4.50%
-46	387.033	425.204	406.118	4.70%	130	0.281	0.308	0.295	4.52%
-45	365.185	400.732	382.959	4.64%	131	0.274	0.301	0.288	4.55%
-44	350.445	384.236	367.340	4.60%	132	0.268	0.294	0.281	4.57%
-43	329.251	360.545	344.898	4.54%	133	0.262	0.287	0.274	4.59%
-42	314.076	343.600	328.838	4.49%	134	0.255	0.280	0.268	4.62%
-41	301.866	329.977	315.921	4.45%	135	0.249	0.274	0.261	4.64%
-40	287.980	314.499	301.239	4.40%	136	0.243	0.267	0.255	4.67%
-39	270.020	294.501	282.261	4.34%	137	0.238	0.261	0.249	4.69%
-38	253.319	275.930	264.624	4.27%	138	0.232	0.255	0.244	4.71%
-37	237.779	258.672	248.226	4.21%	139	0.227	0.249	0.238	4.73%
-36	223.312	242.626	232.969	4.15%	140	0.222	0.244	0.233	4.76%
-35	209.835	227.697	218.766	4.08%	141	0.216	0.238	0.227	4.78%
-34	197.275	213.801	205.538	4.02%	142	0.211	0.233	0.222	4.81%
-33	185.562	200.858	193.210	3.96%	143	0.206	0.227	0.217	4.83%
-32	174.633	188.796	181.714	3.90%	144	0.201	0.222	0.212	4.85%
-31	164.430	177.549	170.990	3.84%	145	0.197	0.217	0.207	4.88%
-30	154.899	167.057	160.978	3.78%	146	0.192	0.212	0.202	4.90%
-29	146.030	157.304	151.667	3.72%	147	0.187	0.207	0.197	4.92%
-28	137.735	148.194	142.964	3.66%	148	0.183	0.202	0.193	4.95%
-27	129.973	139.678	134.826	3.60%	149	0.179	0.198	0.188	4.97%
-26	122.706	131.715	127.211	3.54%	150	0.175	0.193	0.184	4.99%
-25	115.899	124.265	120.082	3.48%	151	0.171	0.189	0.180	5.02%
-24	109.519	117.291	113.405	3.43%	152	0.167	0.184	0.176	5.04%
-23	103.538	110.760	107.149	3.37%	153	0.163	0.180	0.172	5.06%
-22	97.927	104.640	101.284	3.31%	154	0.159	0.176	0.168	5.09%

R at (25°C)= 10KΩ±1%

	, ,	10KΩ±1%			B25/50= 3950K±1%				
T(°C)	Rmin(KΩ)	Rmax(KΩ)	$Rnom(K\Omega)$	Tol.	T(°C)	Rmin(KΩ)	Rmax(KΩ)	Rnom(KΩ)	Tol.
-21	92.661	98.902	95.782	3.26%	155	0.155	0.172	0.164	5.11%
-20	87.717	93.521	90.619	3.20%	156	0.152	0.168	0.160	5.13%
-19	82.981	88.373	85.677	3.15%	157	0.148	0.165	0.157	5.15%
-18	78.536	83.545	81.041	3.09%	158	0.145	0.161	0.153	5.18%
-17	74.360	79.016	76.688	3.04%	159	0.142	0.157	0.150	5.20%
-16	70.436	74.765	72.600	2.98%	160	0.139	0.154	0.146	5.22%
-15	66.747	70.773	68.760	2.93%	161	0.136	0.151	0.143	5.24%
-14	63.278	67.022	65.150	2.87%	162	0.133	0.147	0.140	5.27%
-13	60.014	63.496	61.755	2.82%	163	0.130	0.144	0.137	5.29%
-12	56.941	60.181	58.561	2.77%	164	0.127	0.141	0.134	5.31%
-11	54.047	57.063	55.555	2.71%	165	0.124	0.138	0.131	5.33%
-10	51.321	54.128	52.724	2.66%	166	0.121	0.135	0.128	5.35%
-9	48.752	51.365	50.058	2.61%	167	0.119	0.132	0.125	5.37%
-8	46.330	48.762	47.546	2.56%	168	0.116	0.129	0.123	5.40%
-7	44.044	46.310	45.177	2.51%	169	0.114	0.127	0.120	5.42%
-6	41.888	43.998	42.943	2.46%	170	0.111	0.124	0.118	5.44%
-5	39.852	41.817	40.834	2.41%	171	0.109	0.122	0.115	5.46%
-4	37.923	39.753	38.838	2.36%	172	0.107	0.119	0.113	5.48%
-3	36.100	37.805	36.952	2.31%	173	0.104	0.117	0.111	5.50%
-2	34.378	35.966	35.172	2.26%	174	0.102	0.114	0.108	5.52%
-1	32.749	34.228	33.489	2.21%	175	0.100	0.112	0.106	5.54%
0	31.209	32.587	31.898	2.16%	176	0.098	0.110	0.104	5.56%
1	29.736	31.019	30.377	2.11%	177	0.096	0.107	0.102	5.58%
2	28.343	29.536	28.939	2.06%	178	0.094	0.105	0.100	5.60%
3	27.024	28.135	27.579	2.01%	179	0.092	0.103	0.098	5.62%
4	25.775	26.809	26.292	1.97%	180	0.090	0.101	0.096	5.64%
5	24.593	25.555	25.074	1.92%	181	0.089	0.099	0.094	5.66%
6	23.439	24.333	23.886	1.87%	182	0.087	0.097	0.092	5.68%
7	22.347	23.177	22.762	1.82%	183	0.085	0.095	0.090	5.70%
8	21.314	22.084	21.699	1.77%	184	0.083	0.094	0.089	5.72%
9	20.335	21.049	20.692	1.73%	185	0.082	0.092	0.087	5.74%
10	19.407	20.070	19.739	1.68%	186	0.080	0.090	0.085	5.76%
11	18.527	19.142	18.835	1.63%	187	0.079	0.088	0.084	5.78%
12	17.693	18.263	17.978	1.59%	188	0.077	0.087	0.082	5.80%

T(°C) Rmin(ΚΩ) Rmax(ΚΩ) Rnom(ΚΩ) Tol. T(°C) Rmin(ΚΩ) Rmax(ΚΩ) Rnom(ΚΩ) 13 16.902 17.430 17.166 1.54% 189 0.076 0.085 0.08 14 16.151 16.641 16.396 1.49% 190 0.074 0.083 0.07 15 15.438 15.892 15.665 1.45% 191 0.073 0.082 0.07 16 14.750 15.169 14.960 1.40% 192 0.071 0.080 0.07 17 14.096 14.484 14.290 1.36% 193 0.070 0.079 0.07 18 13.476 13.834 13.655 1.31% 194 0.069 0.077 0.07 19 12.887 13.218 13.052 1.27% 195 0.067 0.076 0.07 20 12.328 12.632 12.480 1.22% 196 0.066 0.075 0.07	5.82% 5.84% 5.86% 5.88% 5.89% 5.91% 5.93% 5.95% 5.97%
14 16.151 16.641 16.396 1.49% 190 0.074 0.083 0.07 15 15.438 15.892 15.665 1.45% 191 0.073 0.082 0.07 16 14.750 15.169 14.960 1.40% 192 0.071 0.080 0.07 17 14.096 14.484 14.290 1.36% 193 0.070 0.079 0.07 18 13.476 13.834 13.655 1.31% 194 0.069 0.077 0.07 19 12.887 13.218 13.052 1.27% 195 0.067 0.076 0.07 20 12.328 12.632 12.480 1.22% 196 0.066 0.075 0.07 21 11.791 12.072 11.932 1.18% 197 0.065 0.073 0.06 22 11.282 11.541 11.411 1.13% 198 0.064 0.072 0.06 23	5.84% 5.86% 5.88% 5.89% 5.91% 5.93% 5.95% 5.97%
15 15.438 15.892 15.665 1.45% 191 0.073 0.082 0.07 16 14.750 15.169 14.960 1.40% 192 0.071 0.080 0.07 17 14.096 14.484 14.290 1.36% 193 0.070 0.079 0.07 18 13.476 13.834 13.655 1.31% 194 0.069 0.077 0.07 19 12.887 13.218 13.052 1.27% 195 0.067 0.076 0.07 20 12.328 12.632 12.480 1.22% 196 0.066 0.075 0.07 21 11.791 12.072 11.932 1.18% 197 0.065 0.073 0.06 22 11.282 11.541 11.411 1.13% 198 0.064 0.072 0.06 23 10.798 11.036 10.917 1.09% 199 0.063 0.071 0.06	5.86% 5.88% 5.89% 5.91% 5.93% 5.95% 5.95%
16 14.750 15.169 14.960 1.40% 192 0.071 0.080 0.07 17 14.096 14.484 14.290 1.36% 193 0.070 0.079 0.07 18 13.476 13.834 13.655 1.31% 194 0.069 0.077 0.07 19 12.887 13.218 13.052 1.27% 195 0.067 0.076 0.07 20 12.328 12.632 12.480 1.22% 196 0.066 0.075 0.07 21 11.791 12.072 11.932 1.18% 197 0.065 0.073 0.06 22 11.282 11.541 11.411 1.13% 198 0.064 0.072 0.06 23 10.798 11.036 10.917 1.09% 199 0.063 0.071 0.06	5.88% 5.89% 5.91% 5.93% 5.95% 5.95%
17 14.096 14.484 14.290 1.36% 193 0.070 0.079 0.07 18 13.476 13.834 13.655 1.31% 194 0.069 0.077 0.07 19 12.887 13.218 13.052 1.27% 195 0.067 0.076 0.07 20 12.328 12.632 12.480 1.22% 196 0.066 0.075 0.07 21 11.791 12.072 11.932 1.18% 197 0.065 0.073 0.06 22 11.282 11.541 11.411 1.13% 198 0.064 0.072 0.06 23 10.798 11.036 10.917 1.09% 199 0.063 0.071 0.06	5.89% 5.91% 5.93% 5.95% 5.95%
18 13.476 13.834 13.655 1.31% 194 0.069 0.077 0.07 19 12.887 13.218 13.052 1.27% 195 0.067 0.076 0.07 20 12.328 12.632 12.480 1.22% 196 0.066 0.075 0.07 21 11.791 12.072 11.932 1.18% 197 0.065 0.073 0.06 22 11.282 11.541 11.411 1.13% 198 0.064 0.072 0.06 23 10.798 11.036 10.917 1.09% 199 0.063 0.071 0.06	5.91% 5.93% 5.95% 5.97%
19 12.887 13.218 13.052 1.27% 195 0.067 0.076 0.07 20 12.328 12.632 12.480 1.22% 196 0.066 0.075 0.07 21 11.791 12.072 11.932 1.18% 197 0.065 0.073 0.06 22 11.282 11.541 11.411 1.13% 198 0.064 0.072 0.06 23 10.798 11.036 10.917 1.09% 199 0.063 0.071 0.06	5.93% 5.95% 5.97%
20 12.328 12.632 12.480 1.22% 196 0.066 0.075 0.07 21 11.791 12.072 11.932 1.18% 197 0.065 0.073 0.06 22 11.282 11.541 11.411 1.13% 198 0.064 0.072 0.06 23 10.798 11.036 10.917 1.09% 199 0.063 0.071 0.06	5.95% 5.97%
21 11.791 12.072 11.932 1.18% 197 0.065 0.073 0.06 22 11.282 11.541 11.411 1.13% 198 0.064 0.072 0.06 23 10.798 11.036 10.917 1.09% 199 0.063 0.071 0.06	5.97%
22 11.282 11.541 11.411 1.13% 198 0.064 0.072 0.06 23 10.798 11.036 10.917 1.09% 199 0.063 0.071 0.06	
23 10.798 11.036 10.917 1.09% 199 0.063 0.071 0.06	3 5.99%
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24 10.338 10.556 10.447 1.04% 200 0.061 0.069 0.06	7 6.01%
	6.02%
25 9.900 10.100 10.000 1.00% 201 0.060 0.068 0.06	6.04%
26 9.476 9.676 9.576 1.04% 202 0.059 0.067 0.06	6.06%
27 9.073 9.272 9.173 1.09% 203 0.058 0.066 0.06	2 6.08%
28 8.690 8.888 8.789 1.13% 204 0.057 0.064 0.06	1 6.10%
29 8.325 8.522 8.423 1.17% 205 0.056 0.063 0.06	6.12%
30 7.977 8.173 8.075 1.21% 206 0.055 0.062 0.05	6.14%
31 7.640 7.834 7.737 1.26% 207 0.054 0.061 0.05	7 6.15%
32 7.319 7.511 7.415 1.30% 208 0.053 0.060 0.05	6.17%
33 7.013 7.204 7.109 1.34% 209 0.052 0.059 0.05	6.19%
34 6.722 6.911 6.816 1.38% 210 0.051 0.058 0.05	6.21%
35 6.445 6.631 6.538 1.42% 211 0.050 0.057 0.05	6.23%
36 6.183 6.367 6.275 1.47% 212 0.049 0.056 0.05	2 6.24%
37 5.933 6.115 6.024 1.51% 213 0.048 0.055 0.05	1 6.26%
38 5.695 5.874 5.785 1.55% 214 0.047 0.054 0.05	1 6.28%
39 5.468 5.645 5.556 1.59% 215 0.047 0.053 0.05	6.30%
40 5.251 5.425 5.338 1.63% 216 0.046 0.052 0.04	6.32%
41 5.041 5.212 5.127 1.67% 217 0.045 0.051 0.04	6.33%
42 4.841 5.009 4.925 1.71% 218 0.044 0.050 0.04	7 6.35%
43 4.650 4.815 4.733 1.75% 219 0.043 0.049 0.04	6.37%
44 4.467 4.630 4.549 1.79% 220 0.043 0.048 0.04	6.39%
45 4.293 4.453 4.373 1.83% 221 0.042 0.048 0.04	6.40%
46 4.125 4.281 4.203 1.87% 222 0.041 0.047 0.04	4 6.42%

R at (25°C)= 10KΩ±1%

		10KΩ±1%			B25/50= 3950K±1%				
T(℃)	$Rmin(K\Omega)$	Rmax(KΩ)	Rnom(KΩ)	Tol.	T(℃)	Rmin(KΩ)	Rmax(KΩ)	$Rnom(K\Omega)$	Tol.
47	3.964	4.118	4.041	1.91%	223	0.040	0.046	0.043	6.44%
48	3.810	3.961	3.886	1.95%	224	0.040	0.045	0.042	6.46%
49	3.663	3.811	3.737	1.98%	225	0.039	0.044	0.042	6.47%
50	3.515	3.660	3.588	2.01%	226	0.038	0.044	0.041	6.49%
51	3.389	3.532	3.461	2.06%	227	0.038	0.043	0.041	6.50%
52	3.262	3.401	3.332	2.10%	228	0.037	0.043	0.040	6.52%
53	3.139	3.277	3.208	2.14%	229	0.037	0.042	0.039	6.53%
54	3.023	3.157	3.090	2.17%	230	0.036	0.041	0.039	6.55%
55	2.911	3.042	2.977	2.21%	231	0.036	0.041	0.038	6.56%
56	2.803	2.932	2.868	2.25%	232	0.035	0.040	0.038	6.57%
57	2.701	2.827	2.764	2.29%	233	0.035	0.040	0.037	6.59%
58	2.602	2.726	2.664	2.32%	234	0.034	0.039	0.037	6.60%
59	2.508	2.629	2.568	2.36%	235	0.034	0.038	0.036	6.62%
60	2.418	2.536	2.477	2.40%	236	0.033	0.038	0.036	6.63%
61	2.332	2.449	2.390	2.43%	237	0.033	0.037	0.035	6.65%
62	2.251	2.364	2.308	2.47%	238	0.032	0.037	0.035	6.66%
63	2.172	2.284	2.228	2.50%	239	0.032	0.036	0.034	6.67%
64	2.097	2.206	2.151	2.54%	240	0.031	0.036	0.034	6.69%
65	2.025	2.132	2.078	2.57%	241	0.031	0.035	0.033	6.70%
66	1.954	2.059	2.007	2.61%	242	0.031	0.035	0.033	6.72%
67	1.887	1.989	1.938	2.64%	243	0.030	0.034	0.032	6.73%
68	1.822	1.922	1.872	2.68%	244	0.030	0.034	0.032	6.74%
69	1.760	1.858	1.809	2.71%	245	0.029	0.033	0.031	6.76%
70	1.700	1.796	1.748	2.74%	246	0.029	0.033	0.031	6.77%
71	1.643	1.737	1.690	2.78%	247	0.028	0.033	0.031	6.78%
72	1.589	1.681	1.635	2.81%	248	0.028	0.032	0.030	6.80%
73	1.537	1.627	1.582	2.84%	249	0.028	0.032	0.030	6.81%
74	1.487	1.575	1.531	2.88%	250	0.027	0.031	0.029	6.82%
75	1.439	1.525	1.482	2.91%	251	0.027	0.031	0.029	6.84%
76	1.390	1.474	1.432	2.94%	252	0.027	0.031	0.029	6.85%
77	1.343	1.426	1.384	2.98%	253	0.026	0.030	0.028	6.86%
78	1.298	1.379	1.339	3.01%	254	0.026	0.030	0.028	6.88%
79	1.255	1.334	1.295	3.04%	255	0.025	0.029	0.027	6.90%
80	1.214	1.291	1.252	3.08%	256	0.025	0.029	0.027	6.91%

R at (25°C)= 10KΩ±1%

	, ,	10KΩ±1%			B25/50= 3950K±1%				
T(°C)	Rmin(KΩ)	Rmax(KΩ)	Rnom(KΩ)	Tol.	T(℃)	Rmin(KΩ)	Rmax(KΩ)	$Rnom(K\Omega)$	Tol.
81	1.174	1.250	1.212	3.11%	257	0.025	0.028	0.026	6.93%
82	1.137	1.210	1.173	3.14%	258	0.024	0.028	0.026	6.94%
83	1.100	1.172	1.136	3.17%	259	0.024	0.027	0.026	6.96%
84	1.065	1.136	1.100	3.21%	260	0.023	0.027	0.025	6.98%
85	1.031	1.100	1.066	3.24%	261	0.023	0.026	0.025	7.00%
86	0.999	1.066	1.033	3.27%	262	0.023	0.026	0.024	7.01%
87	0.968	1.034	1.001	3.30%	263	0.022	0.026	0.024	7.03%
88	0.938	1.002	0.970	3.33%	264	0.022	0.025	0.023	7.05%
89	0.909	0.972	0.940	3.36%	265	0.021	0.025	0.023	7.07%
90	0.881	0.943	0.912	3.39%	266	0.021	0.024	0.023	7.08%
91	0.853	0.914	0.884	3.43%	267	0.021	0.024	0.022	7.10%
92	0.827	0.886	0.857	3.46%	268	0.020	0.023	0.022	7.12%
93	0.802	0.860	0.831	3.49%	269	0.020	0.023	0.021	7.14%
94	0.777	0.834	0.806	3.52%	270	0.019	0.022	0.021	7.17%
95	0.754	0.809	0.781	3.55%	271	0.019	0.022	0.020	7.19%
96	0.731	0.786	0.758	3.58%	272	0.018	0.021	0.020	7.21%
97	0.710	0.763	0.737	3.61%	273	0.018	0.021	0.019	7.23%
98	0.689	0.741	0.715	3.64%	274	0.018	0.020	0.019	7.25%
99	0.669	0.720	0.695	3.67%	275	0.017	0.020	0.019	7.28%
100	0.650	0.700	0.675	3.69%	276	0.017	0.020	0.018	7.30%
101	0.631	0.680	0.655	3.72%	277	0.017	0.019	0.018	7.32%
102	0.613	0.660	0.636	3.75%	278	0.016	0.019	0.017	7.35%
103	0.595	0.642	0.618	3.78%	279	0.016	0.018	0.017	7.37%
104	0.578	0.623	0.601	3.81%	280	0.015	0.018	0.016	7.40%
105	0.561	0.606	0.583	3.84%	281	0.015	0.017	0.016	7.42%
106	0.545	0.588	0.567	3.87%	282	0.014	0.017	0.016	7.45%
107	0.529	0.572	0.550	3.90%	283	0.014	0.016	0.015	7.48%
108	0.513	0.555	0.534	3.93%	284	0.014	0.016	0.015	7.50%
109	0.499	0.540	0.519	3.96%	285	0.013	0.015	0.014	7.54%
110	0.484	0.524	0.504	3.99%	286	0.013	0.015	0.014	7.57%
111	0.471	0.510	0.491	4.01%	287	0.012	0.014	0.013	7.60%
112	0.458	0.497	0.477	4.04%	288	0.012	0.014	0.013	7.63%
113	0.446	0.484	0.465	4.07%	289	0.012	0.014	0.013	7.67%
114	0.434	0.471	0.452	4.09%	290	0.011	0.013	0.012	7.70%

R at (25℃)= 10KΩ±1%

B25/50= 3950K±1%

T(°C)	Rmin(KΩ)	Rmax(KΩ)	Rnom(KΩ)	Tol.	T(°C)	Rmin(KΩ)	Rmax(KΩ)	Rnom(KΩ)	Tol.
115	0.422	0.458	0.440	4.12%	291	0.011	0.013	0.012	7.73%
116	0.411	0.446	0.429	4.15%	292	0.010	0.012	0.011	7.77%
117	0.400	0.435	0.417	4.17%	293	0.010	0.012	0.011	7.82%
118	0.389	0.424	0.406	4.20%	294	0.010	0.011	0.010	7.86%
119	0.379	0.413	0.396	4.23%	295	0.009	0.011	0.010	7.90%
120	0.369	0.402	0.386	4.25%	296	0.009	0.010	0.010	7.93%
121	0.359	0.391	0.375	4.28%	297	0.009	0.010	0.009	7.96%
122	0.349	0.381	0.365	4.31%	298	0.008	0.010	0.009	7.98%
123	0.340	0.371	0.355	4.34%	299	0.008	0.010	0.009	8.01%
124	0.331	0.361	0.346	4.36%	300	0.008	0.009	0.009	8.05%
125	0.322	0.351	0.336	4.39%					